

Shawnee County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/30/2017

Using the most recent IMPLAN data available (2015) adjusted for 2017, 28 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Shawnee County economy.¹

These 28 sectors have a total direct output of approximately **\$2.00 billion** and support **4,335.6 jobs** in Shawnee County. Running the model for all 28 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Shawnee County Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product
Direct Effect	4,335.6	3.68%	\$427,762,944	4.45%	\$2,004,682,049	20.85%
Indirect Effect	2,775.6	2.36%	\$273,022,334	2.84%	\$487,051,388	5.07%
Induced Effect	1,870.4	1.59%	\$137,573,680	1.43%	\$239,292,017	2.49%
Total Effect	8,981.5	7.63%	\$838,358,958	8.72%	\$2,731,025,453	28.41%

As shown in the above table, agriculture, food, and food processing sectors support **8,981.5 jobs**, or **7.63%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$2.73 billion**, roughly **28.41% of the economy**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 28 agriculture, food, and food processing sectors is approximately **\$838.4 million**, or **8.72% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **8.72% of the total economy**.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the all other food manufacturing sector is the top employer with **1,094.7 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Shawnee County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
All other food manufacturing	1,094.7	\$373,311,178
Wholesale trade	625.0	\$162,237,404
Other snack food manufacturing	612.8	\$370,667,593
Dog and cat food manufacturing	462.1	\$703,471,811
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	436.3	\$24,047,687
Landscape and horticultural services	351.8	\$26,844,834
Truck transportation	319.1	\$45,082,157
Veterinary services	277.6	\$28,787,069
Management of companies and enterprises	226.2	\$56,623,059
Animal, except poultry, slaughtering	205.1	\$152,170,474

The dog and cat food manufacturing sector directly contributes approximately **\$703.5 million** to the Shawnee County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Dog and cat food manufacturing	462.1	\$703,471,811
All other food manufacturing	1094.7	\$373,311,178
Other snack food manufacturing	612.8	\$370,667,593
Wholesale trade	625.0	\$162,237,404
Chocolate and confectionery manufacturing from cacao beans	187.2	\$161,233,520
Animal, except poultry, slaughtering	205.1	\$152,170,474
Management of companies and enterprises	226.2	\$56,623,059
Truck transportation	319.1	\$45,082,157
Other animal food manufacturing	23.6	\$35,127,758
Owner-occupied dwellings	0.0	\$34,007,820

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Shawnee County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	31.0	\$16,162,767.41
Grain farming	120.3	\$21,082,370.76
Vegetable and melon farming	0.6	\$89,709.80
Fruit farming	2.6	\$185,970.90
Tree nut farming	0.0	\$19.18
Greenhouse, nursery, and floriculture production	9.1	\$1,095,444.92
All other crop farming	106.2	\$3,814,346.31
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	436.3	\$24,047,685.62
Poultry and egg production	1.0	\$544,559.84
Animal production, except cattle and poultry and eggs	38.0	\$2,523,066.28
Commercial logging	1.1	\$45,288.06
Commercial hunting and trapping	12.6	\$641,862.93
Dog and cat food manufacturing	462.1	\$703,471,801.76
Other animal food manufacturing	23.6	\$35,127,758.03
Chocolate and confectionery manufacturing from cacao beans	187.2	\$161,233,520.51
Confectionery manufacturing from purchased chocolate	27.8	\$8,330,064.77
Animal, except poultry, slaughtering	205.1	\$152,170,471.19
Bread and bakery product, except frozen, manufacturing	179.3	\$21,884,939.19
Frozen cakes and other pastries manufacturing	7.6	\$1,139,343.14
Other snack food manufacturing	612.8	\$370,667,572.02
Coffee and tea manufacturing	21.9	\$10,587,257.39
All other food manufacturing	1,094.7	\$373,311,157.23
Wineries	1.7	\$419,833.06
Farm machinery and equipment manufacturing	25.7	\$14,354,974.75
Food product machinery manufacturing	11.6	\$3,350,775.48
All other industrial machinery manufacturing	86.5	\$22,767,530.44
Veterinary services	277.6	\$28,787,067.41
Landscape and horticultural services	351.8	\$26,844,833.37

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Shawnee County, the retail sector was omitted.